

Work Order ID 52017

September 11, 2009 11:16:38 AM



Page 1

Item ID: D3936-041

Accept



Setup Start



Revision ID: A

Stop



Item Name: Mapbox Assembly

Start Date: 9/11/09 Start Qty: 2.00



Cust Item ID:

Required Date: 9/25/09 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan:

Date: 09/9/11

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
Description

Draw Nbr

Revision Nbr

D3936

A

100



Small Fab

Memo

Small Fab

Assemble as per dwg

Set Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

110



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

120



Powdercoat

Powder Coating

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

0.00

Memo

START TIME: 10:30AM
 OVEN TEMPERATURE: 320°F
 FINISH TIME: 11:00PM

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 52017

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Page 2

Item ID: D3936-041

Revision ID: A

Item Name: Mapbox Assembly

Start Date: 9/11/09 Start Qty: 2.00

Required Date: 9/25/09 Req'd Qty: 2.00

Reference:

Approvals: Process Plan:

QC:

Date:

Tooling:

Date:

Run Start

Stop



Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

130



QC

Quality Control

Operation
Description

QC3- Inspect Part Finish

Set Up/
Run Hours

0.00

Draw
Number

BL

Draw
Rev.

W-02-11

Plan
Code

(3)

Accept
Qty

0.00

Reject
Qty

0.00

Reject
Number

0.00

Insp.
Stamp

0.00

140



Small Fab

Small Fab

Memo

0.00

0.00
INSTALL RUBBER CUSHION AND PLACARD AS PER DWG

EP 10/02/16 (3)

150



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S 10/02/16

0.00

(73)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 52017

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Item ID: D3936-041

Accept



Setup

Start



Revision ID: A

Stop



Item Name: Mapbox Assembly

Start Date: 9/11/09 Start Qty: 2.00



Cust Item ID:

Required Date: 9/25/09 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
Description

160



Packaging

Packaging

Set Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Identify as per dwg & Stock Location: _____

0.00

10-2-17

(3) SP

170



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/02/17 JJ

PL 10-2-17
(3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

September 11, 2009 11:16:37 AM

Page 1
1/2

Work Order ID: 52017



Parent Item: D3936-041RevA



Parent Item Name: Mapbox Assembly

Start Date: 9/11/09

Required Date: 9/25/09

Comments:

Start Qty: 2.00

Required Qty: 2.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3936-1RevA Sides		Manufactured		No		100	Each	0.0000	2.0000	B53934 (34)	E9/10/02/09	
D3936-3RevA Bottom		Manufactured		No		100	Each	0.0000	2.0000	B52383 (37)	E9/10/02/09	
D3936-5RevA Divider		Manufactured		No		100	Each	0.0000	2.0000	B52178 (1X)	B53935 (2X)	E9/10/02/09
D3938-3RevB Placard		Manufactured		No		140	Each	0.0000	4.0000	B48511 (4X)		E9/10/02/16
D3941-40RevA Rubber Cushion CUT (1x) 40.00" PER DWG		Purchased		No		140	Each	0.0000	4.0000	B52200 (4X)		E9/10/02/16
D3941-12RevA Rubber Cushion CUT (1X) 12.00" PER DWG		Purchased		No		140	Each	0.0000	4.0000	B52201 (4X)		E9/10/02/16
MS20426AD3-4 RIVET		Purchased		No		100	Each	8,237.000	112.0000		224	E9/10/02/09

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Main Warehouse

ST	8237	
104374	4237	224
110398	4000	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 52017



Parent Item: D3936-041RevA



Parent Item Name: Mapbox Assembly

Start Date: 9/11/09

Required Date: 9/25/09

Comments:

Start Qty: 2.00

Required Qty: 2.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS20426AD3-5		Purchased		No		100	Each	15,997.00	16.0000			

Rivet



Warehouse

Location

Main Warehouse

ST	15997	
4179	4159	
4444	5678	
4533	6160	

EF 10/02/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

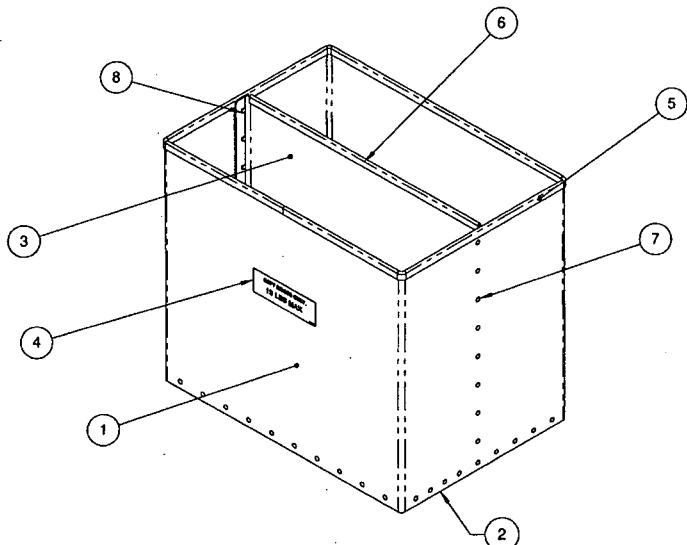
SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 52017

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	1	D3936-1	SIDES
2	1	D3936-3	BOTTOM
3	1	D3936-5	DIVIDER
4	1	D3938-3	PLACARD
5	1	D3941-40	RUBBER CUSHION
6	1	D3941-12	RUBBER CUSHION
7	56	MS20426AD3-4	RIVET
8	8	MS20426AD3-5	RIVET



D3936-041 MAPBOX ASSEMBLY

NOTES:

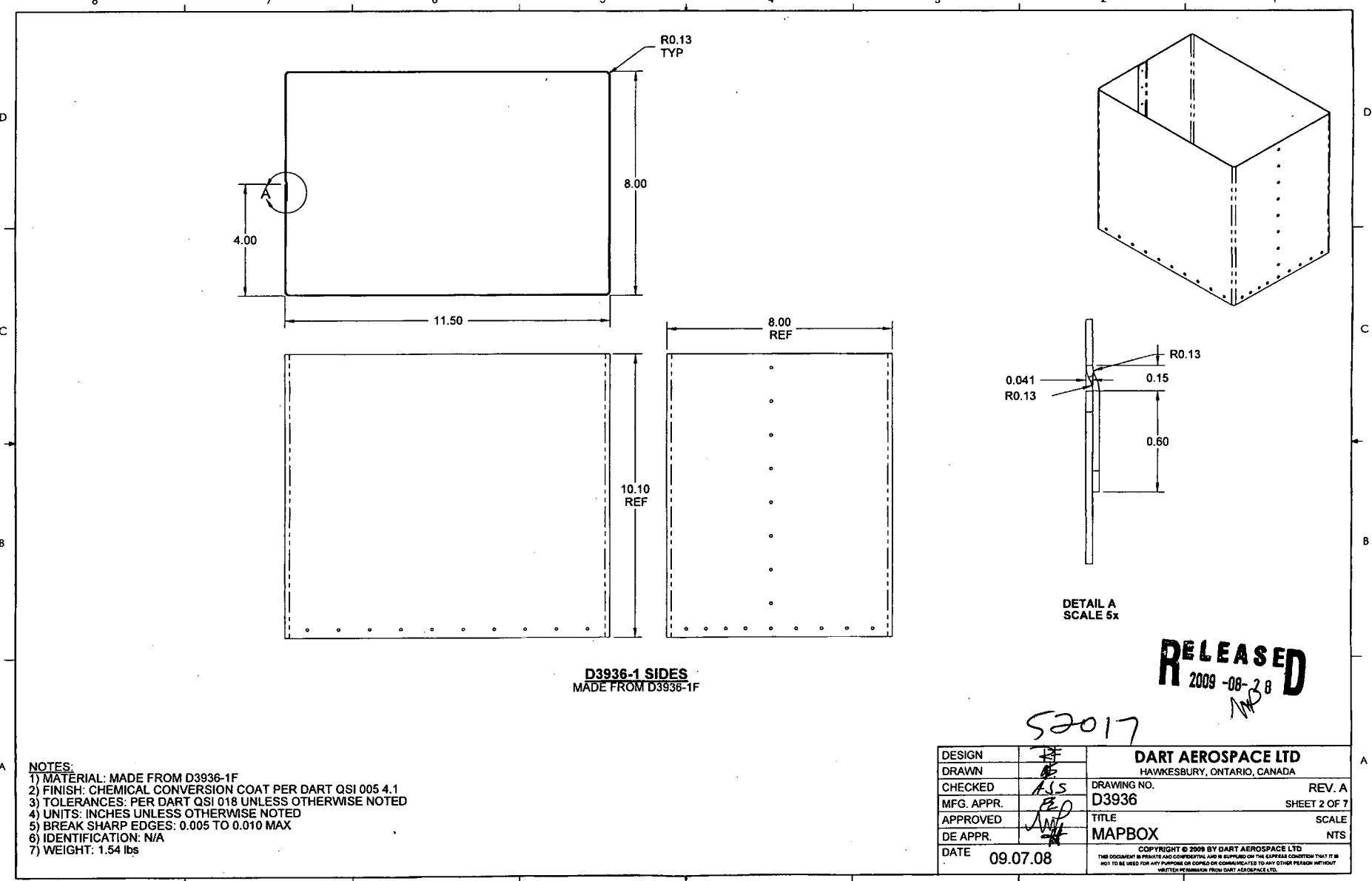
- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3936-041" AND B/N USING A WHITE FINE POINT PAINT MARKER
- 7) WEIGHT: 2.54 lbs

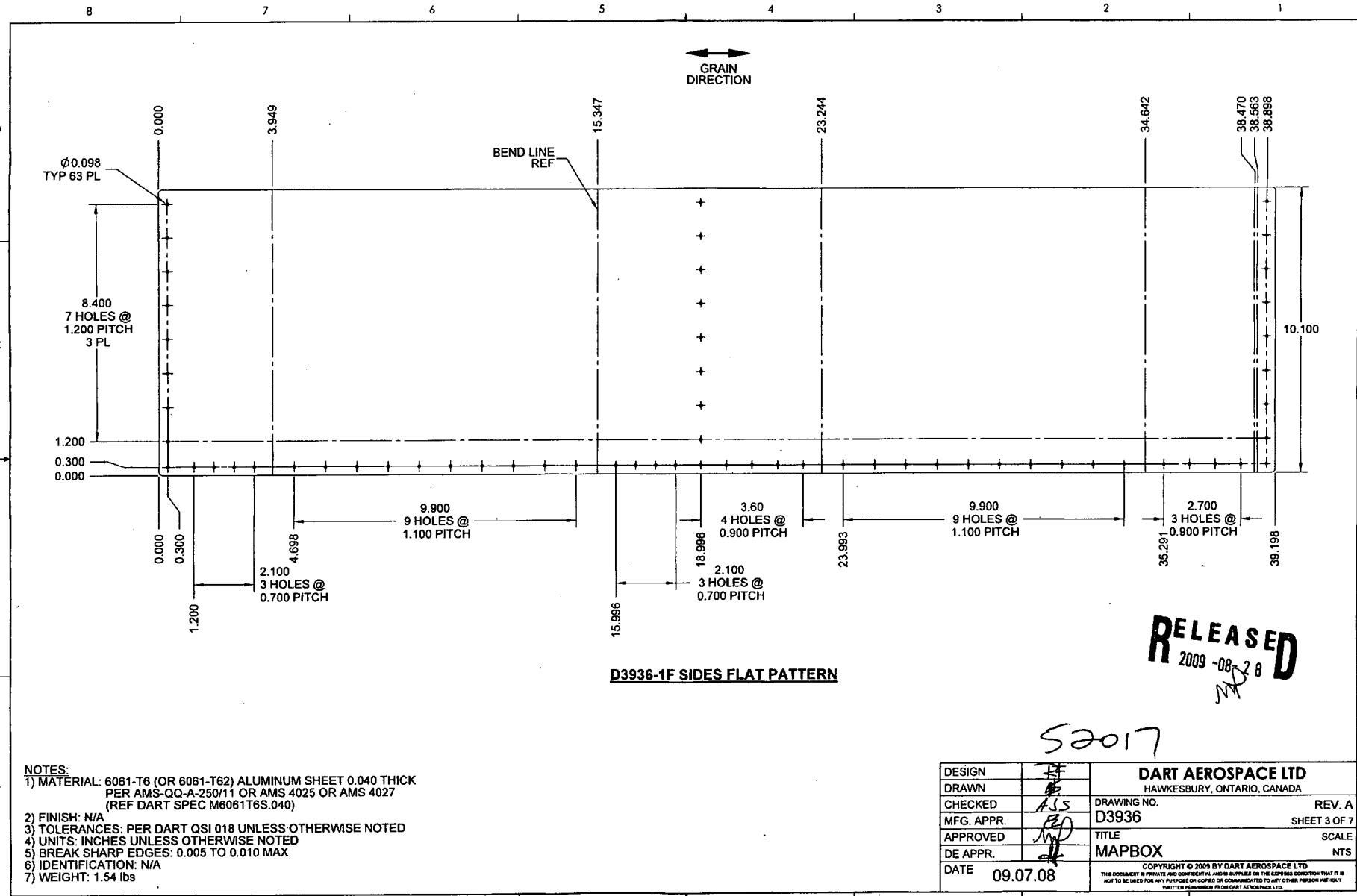
ASSEMBLY INSTRUCTIONS

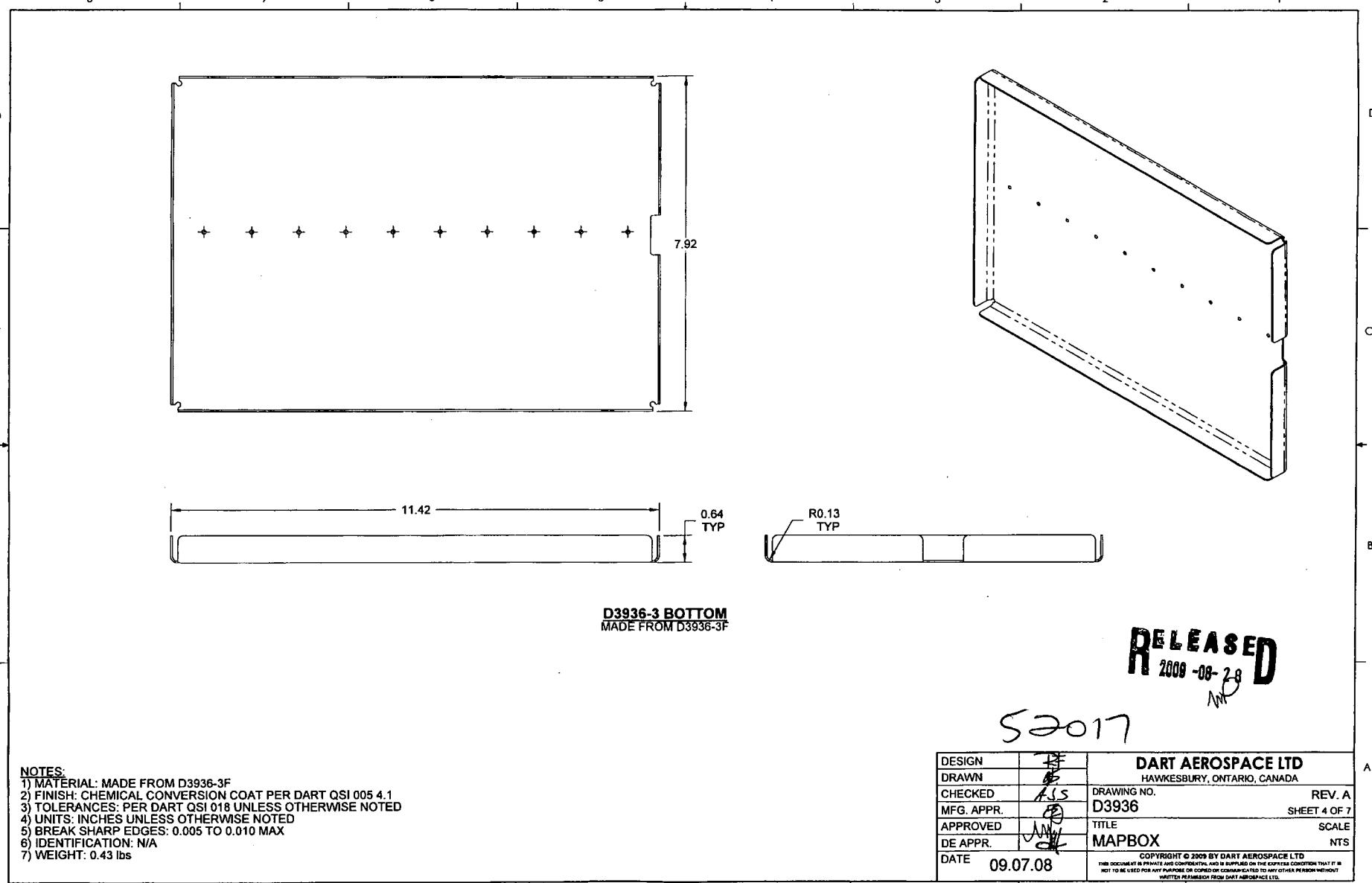
1. BEND D3936-1/3-5 PARTS PER SHEETS 2-7.
2. POSITION D3936-5 DIVIDER IN PLACE INSIDE THE D3936-1 SIDES AND CLECO IN PLACE.
3. POSITION THE D3936-3 BOTTOM IN PLACE AGAINST THE D3936-5 DIVIDER AND INSIDE THE D3936-1 SIDES.
4. TRANSFER DRILL 10X Ø0.098 (#40 DRILL) HOLES FROM THE D3936-3 BOTTOM TO THE D3936-5 DIVIDER. PLACE CLECOS IN TRANSFER DRILLED HOLES TO MAINTAIN ALIGNMENT AS THEY ARE DRILLED.
5. TRANSFER DRILL 38X Ø0.098 HOLES FROM D3936-1 SIDES TO D3936-3 BOTTOM. PLACE CLECOS IN TRANSFER DRILLED HOLES TO MAINTAIN ALIGNMENT AS THEY ARE DRILLED.
6. REMOVE ALL CLECOS AND COUNTERSINK 64X EXTERIOR HOLES Ø0.179 X 100°. DEBURR ALL HOLES IN ALL PARTS.
7. REASSEMBLE PARTS USING CLECOS IN EVERY THIRD HOLE TO MAINTAIN ALIGNMENT.
8. RIVET D3936-1 SIDE TO D3936-5 DIVIDER USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
9. RIVET D3936-5 DIVIDER TO D3936-3 BOTTOM USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
10. RIVET D3936-3 BOTTOM TO D3936-1 SIDE USING MS20426AD3 RIVETS. INSTALL MS20426AD3 RIVETS RANDOMLY THROUGHOUT ASSEMBLY SO THAT ALL PARTS ARE DRAWN TOGETHER EVENLY.
11. POWDER COAT ASSEMBLY PER NOTE 2.
12. TEST FIT RUBBER CUSHION TO TOP EDGE OF MAPBOX. TRIM AS REQUIRED FOR PROPER FIT.
13. REMOVE RUBBER CUSHION.
14. APPLY SMALL BEAD OF SILICONE/ADHESIVE TO TOP EDGE OF MAPBOX.
15. SLIDE RUBBER CUSHION OVER EDGE AND PRESS INTO SILICONE/ADHESIVE.
16. WIPE OFF ANY EXCESS SILICONE/ADHESIVE BEFORE IT DRIES/CURES.
17. APPLY D3938-3 PLACARD AS SHOWN.
18. ALLOW SEALANT/ADHESIVE TO CURE/DRY 24 HRS BEFORE SHIPPING PART.

RELEASED
2009-08-28
MD

A	NEW ISSUE	B	09.07.08
REV.	DESCRIPTION	BY	DATE
DESIGN	<u>TF</u>	DART AEROSPACE LTD	
DRAWN	<u>BS</u>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<u>AS</u>	DRAWING NO.	REV. A
MFG. APPR.	<u>BS</u>	D3936	SHEET 1 OF 7
APPROVED	<u>AS</u>	TITLE	SCALE
DE APPR.	<u>AS</u>	MAPBOX	NTS
DATE	09.07.08	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	







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DRAWN	AB	HAWKESBURY, ONTARIO, CANADA
CHECKED	ASS	DRAWING NO.
MFG. APPR.	BP	REV. A
APPROVED	WJ	SHEET 4 OF 7
DE APPR.	WJ	TITLE
DATE	09.07.08	SCALE
		NTS

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